

REMARKS

Claim 31 has been amended to include the features of catch means for holding the lid and the base firmly together in the closed position, a switch for closing to cause electric current to flow through the heating means, the switch closing automatically when the lid is brought into its closed position, a controller for controlling the flow of electric current in dependence on a temperature feedback signal, and the heating means including an electric heating element comprised of etched foil. Support for these amendments can be found on page 3, lines 27 to 29, and page 4, lines 5 to 9, 22 to 24 and 29 to 30 of the specification.

The combination of these features is significant in providing a lightweight apparatus that provides an effective seal, while reducing the risk of operator harm, and ensuring that the material (such as a medicament) sealed within the pockets is not damaged by excess heat during the sealing process.

The catch means provides pressure to the pack members in the closed position, which would normally require a heavily weighted lid. This provides a practical advantage in that it enables a lightweight machine to be used that can be easily moved to provide more workspace in otherwise cramped working environments. This, in combination with the controller and temperature feedback mechanism, also allows the user to leave the apparatus while it is operational, with the controller ensuring an effective seal without substantial heating of material located within the pockets. The controller provides control based on a feedback of the actual temperature, rather than a pre-set heat as disclosed in Balzer.

The second improvement provided by this arrangement is the reduced heat energy that is required to seal the pack. This has advantages both in terms of safety, and reducing the possibility of damage to the material in the pockets. This is achieved through the use of a control mechanism and the heating element being formed of etched foil encased in silicone rubber. This

produces a heating element that surrounds only the individual pockets, while having a very low heat capacity, which allows for rapid heating and cooling of the heating element. This, again in combination with the controller and temperature feedback mechanism, reduces heating and possible damage to the material in the pockets. This also reduces the risk of burning the user, as the element will rapidly cool after opening the lid.

In Balzer heating only the edges of the pockets (column 3, lines 27 to 35) is achieved by means of a hinged heat sealing apparatus with a single pocket, with heating elements embedded in the lid to heat the lid and raised contact areas to heat the film over the edges of the pockets for sealing. However, after continual use, the part of the lid placed over the central portion of the pockets may still become relatively hot, as the heat is transferred thereto from the heating elements, and this heat may then be transferred to the contents of the pockets causing damaging thereto. In contrast, the present invention uses etched foil heating elements to directly heat the pack members. This, in combination with the electric current controller and the lid actuatable switch, results in greatly reduced heat being applied to the pockets and therefore to the material in the pockets.

The suggestion of the etched foil heating elements being an engineering choice is noted. However, applicant submits that the claimed combination of features is far from an engineering choice, but rather is a novel and non-obvious combination of features which is thus deserving of patent protection.

It has been clarified that the catch means includes engageable latch members on the base and lid, thereby differentiating from the handle and hinge of Balzer.

Perloff also recognizes the problem of overheating of the medicament, but solves this problem using pressure, rather than reducing by heat sealing of the type used in the present application. However, using heat to seal the pack members results in a greatly improved seal. The combination of features

presented in claim 31 permits heat sealing to be used, without encountering the problems encountered by previous heat sealing arrangements and particularly for packs with a plurality of pockets.

In view of the foregoing, applicant submits that the subject matter of claim 31 is not disclosed or suggested by the cited references, whether taken singly or in combination. Therefore, claim 31 is patentable and it follows that the dependent claims also are patentable.

Respectfully submitted,



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